

AMENDMENTS TO THE SPECIFICATION

Please amend the title to read as follows:

-- EVAPORATION PROCESS CONTROL FOR
USE IN REFRIGERATION TECHNOLOGY --

Please insert the following section heading on page 1 at line 4:

-- BACKGROUND OF THE INVENTION --

Please replace the section heading on page 1 at line 5 with the following section heading:

Technical field-- (1) Field of the Invention --

Please replace the section heading on page 1, at line 12, with the following section heading:

Prior Art-- (2) Description of the Related Art --

Please replace the paragraph on page 1, beginning at line 13, with the following replacement paragraph:

-- Evaporator control with drive dry expansion on the basis of the minimum stable signal (MMS) is illustrated in (Fig.Figs. 1, 2 and 3). --

Please insert on page 2, at line 16, the following section headings and paragraphs:

--Summary of the Invention:

A refrigeration system substantially comprising one or more:

Liquefiers (2), evaporators (4), IHEs (5), refrigerant compressors (1), injection valves (3), refrigerants, refrigeration auxiliary substances and oil.

A refrigeration system, depending on its application, optionally also has one or more of the above-mentioned components and, in addition deheaters (24), one or more waste heat utilization exchangers, further supercoolers (25), viewing windows (7), driers (6), filters, valves (8), safety equipment, shut-off equipment, accumulators, oil pumps, distribution systems, electrical and control parts, refrigeration auxiliary substances, etc.

When fitting the injection valve (3) upstream of the evaporator (4), the measured value for limiting suction vapor is taken off at the suction line leading to the refrigerant compressor (1). The measured values for the refrigerant liquid temperature (11) and the evaporator entry pressure (12) are used to control the evaporation (17, 19).

Alternatively, the measured values for the high pressure (22) upstream of the injection valve (3) and for the suction vapor pressure (12) downstream of the injection valve (3), as well as the hot-gas temperature (15) downstream of the compressor (1) or the oil temperature (16) of the latter, are likewise available for controlling the evaporator (4) with downstream IHE (5).

Brief Description of the Drawings:

Fig. 1 shows the refrigerant circuit in the "prior art" lg p, h diagram;

Fig. 2 shows the "prior art" refrigerant circuit;

Fig. 3 shows the refrigerant circuit in the lg p, h diagram with integrated equipment;

Fig. 4 shows the refrigerant circuit in the lg p, h diagram with IHE of the "prior art";

Fig. 5 shows the refrigerant circuit with IHE of the "prior art";

Fig. 6 shows the refrigerant circuit with IHE of the "prior art" in the lg p, h diagram with integrated equipment;

Fig. 7 shows the refrigerant circuit in the lg p, h diagram with two-stage evaporator of the "patent";

Fig. 8 shows the refrigerant circuit with two-stage evaporator of the "patent";

Fig. 9 shows the refrigerant circuit in the lg p, h diagram with two-stage evaporator of the "patent" with integrated equipment;

Fig. 10 shows the refrigerant circuit in the lg p, h diagram with two-stage evaporator of the "patent" with integrated equipment and two-stage supercooling (and deheater);

Fig. 11 shows the refrigerant circuit with evaporator and measured value combinations;

Figs. 12-18 show different refrigerant circuits in accordance with the subject invention. --

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Please DELETE on page 8, beginning with line 26, and continuing through pages 9 and 10, in their entirety.

Please DELETE Fig. 19, on drawing sheet 12/12, the listing of "Legend for the points from the drawings:" in its entirety.